

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2016 Levee Inspection Results****Sutter Maintenance Yard Maintenance Area 0013**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

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SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway			Bank	Unit Miles
Unit No. 01 Cherokee Canal			Right	18.19
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/14/2016 - 4/14/2016			
DWR Inspector	Keith Millard			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start		Rating **	A	Issue No.	1
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_MA0013_01_s _ 2013_1				
Comment Code					
Inspector Comment					
The LMA has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_MA0013_01_s _ 2013_8				
Comment Code					
Inspector Comment					
The LMA has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	16
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_MA0013_01_s _ 2013_16				
Comment Code					
Inspector Comment					
The LMA completed flood fight training in 2014.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Spring 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

Photo 1 of 1 : SP_2016_MA0013_300_48_20160418_00079.jpg



Photo 1 of 2 : UCIP_SP_2016_48018_66680.jpg



Overview of the crossing.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	0.27	Rating **	U	Issue No.	75 (cont)	
LM End	0.27	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.593094 °	39.593094 °	
				-121.703570 °	-121.703570 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:48018 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found UCIP Comments: 4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection. FIELD_STRUCT_DESC: 8-inch steel pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5 inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8 inch. Pipe section is completely buried. Current configuration does not allow for 5 inch irrigation pipe to slide pipe through. 8 inch pipe is welded solid. (Permit No. 6135-1968, George Washington) FS Date: 5/4/2016 7:18:00 AM						

Photo 2 of 2 : UCIP_SP_2016_48018_66683.jpg



Air Vent located on WS.

LM Start	0.45	Rating **	M	Issue No.	43
LM End	0.45	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.591237 °	39.591237 °
				-121.702015 °	-121.702015 °
DWR ID	DWR_MA0013_01_f_2015_43				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove the prunings from the landside slope.					

Photo 1 of 1 : SP_2016_MA0013_300_43_20160316_00010.jpg



View of the prunings along the landside slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	0.63	Rating **	M	Issue No.	14
LM End	1.17	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.589272 °	39.581472 °
				-121.700599 °	-121.700518 °
DWR ID	DWR_MA0013_01_s_2012_14				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	0.73	Rating **	M	Issue No.	12
LM End	0.76	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.587905 °	39.587505 °
				-121.700822 °	-121.700880 °
DWR ID	DWR_MA0013_01_s_2012_12				
Comment Code					
EQ : Equipment					
Inspector Comment					
Remove the equipment from the landside toe.					

Photo 1 of 1 : SP_2016_MA0013_300_12_20160316_00006.jpg



View of the equipment along the landside toe of the levee.

LM Start	0.87	Rating **	M	Issue No.	44
LM End	0.87	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.585857 °	39.585857 °
				-121.700540 °	-121.700540 °
DWR ID	DWR_MA0013_01_s_2015_44				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove the prunings from the landside slope.					

Photo 1 of 1 : SP_2016_MA0013_300_44_20160316_00011.jpg



View of the prunings along the landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	0.94	Rating **	M	Issue No.	20
LM End	0.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.584885 °	39.584885 °
				-121.700487 °	-121.700487 °
DWR ID	DWR_MA0013_01_s_2013_20				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_20_20160316_00009.jpg



View of the prunings along the landside toe.

LM Start	1.59	Rating **	U	Issue No.	74
LM End	1.59	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.576883 °	39.576883 °
				-121.702770 °	-121.702770 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48017 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10)7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. FIELD_STRUCT_DESC: 36-inch irrigation corrugated metal pipe through the levee, 7.8 feet below crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwalls on both ends (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.62). FS Date: 5/4/2016 8:07:00 AM					

Photo 1 of 2 : UCIP_SP_2016_48017_66695.jpg



Overview of levee crown at crossing looking downstream.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	1.59	Rating **	U	Issue No.	74 (cont)
LM End	1.59	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.576883 °	39.576883 °
				-121.702770 °	-121.702770 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48017 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10)7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. FIELD_STRUCT_DESC: 36-inch irrigation corrugated metal pipe through the levee, 7.8 feet below crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwalls on both ends (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.62). FS Date: 5/4/2016 8:07:00 AM					

Photo 2 of 2 : UCIP_SP_2016_48017_66699.jpg



Corrugated metal riser with slide gate located on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	1.66	Rating **	M	Issue No.	53
LM End	1.66	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.575816 °	39.575816 °
				-121.702900 °	-121.702900 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47623
DS_ID:16345
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing.
FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.69).
FS Date: 5/4/2016 8:08:00 AM

LM Start	1.66	Rating **	M	Issue No.	53 (cont)
LM End	1.66	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47623_66700.jpg



Overview of levee at crossing looking downstream.

Photo 2 of 2 : UCIP_SP_2016_47623_66704.jpg



WS view looking upstream.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	2.31	Rating **	M	Issue No.	54
LM End	2.31	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.566433 °	39.566433 °
				-121.703750 °	-121.703750 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47624
DS_ID:16346
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried. 7/14/2015 Still cannot find an inlet or outlet. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible.
FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.35).
FS Date: 5/4/2016 8:09:00 AM

LM Start	2.31	Rating **	M	Issue No.	54 (cont)
LM End	2.31	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47624_66708.jpg



Overview of crossing looking DS.

Photo 2 of 2 : UCIP_SP_2016_47624_66709.jpg



Corrugated riser located on WS slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	3.05	Rating **	M	Issue No.	56
LM End	3.05	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.556310 °	39.556310 °
				-121.706470 °	-121.706470 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47640
DS_ID:17372
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that discharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from. 7/14/2015 Crossing appears in good condition. No noticeable issues to report. 5/21/2014 Same as last inspection. 12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. 7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall. 4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.
FIELD_STRUCT_DESC: 36 inch corrugated metal drainpipe 11.8 feet below the crown. Flapgate is located on the waterside (WS). Concrete headwall located on landside (LS). (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.10).
FS Date: 5/4/2016 8:27:00 AM

LM Start	3.05	Rating **	M	Issue No.	56 (cont)
LM End	3.05	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47640_66718.jpg



Overview of levee crown looking downstream at crossing.

Photo 2 of 2 : UCIP_SP_2016_47640_66716.jpg



WS levee slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	3.05	Rating **	M	Issue No.	57
LM End	3.05	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.556276 °	39.556276 °
				-121.706510 °	-121.706510 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47641 DS_ID:16348 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 4/28/2016 Unable to locate.7/14/2015 Unable to locate.5/21/2014 Same as last inspection.12/2/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Crossing not visible during the Spring 2012 Inspection. Attempt to find crossing during next inspection when slopes are cleared of vegetation. FIELD_STRUCT_DESC: 24-inch drainpipe through the levee, flap gate on waterside (WS) end. Concrete headwall on both ends. FS Date: 5/4/2016 8:26:00 AM					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	3.24	Rating **	M	Issue No.	76
LM End	3.24	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.553490 °	39.553490 °
				-121.706680 °	-121.706680 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48019
DS_ID:16349
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.9 feet below the crown. Flap gate on waterside (WS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.29).
FS Date: 5/4/2016 8:30:00 AM

LM Start	3.24	Rating **	M	Issue No.	76 (cont)
LM End	3.24	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48019_66725.jpg



Overview of levee crown looking DS at crossing.

Photo 2 of 2 : UCIP_SP_2016_48019_66724.jpg



Flap gate on WS.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	3.73	Rating **	M	Issue No.	51
LM End	3.73	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.546465 °	39.546465 °
				-121.707530 °	-121.707530 °
DWR ID	DWR_MA0013_01_s_2016_51				
Comment Code					
EQ : Equipment					
Inspector Comment					
Ag equipment at toe of slope					

No Photos

LM Start	3.74	Rating **	M	Issue No.	55
LM End	3.74	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.546317 °	39.546317 °
				-121.707510 °	-121.707510 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47639 DS_ID:16365 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82). FS Date: 5/4/2016 8:34:00 AM					

Photo 1 of 2 : UCIP_SP_2016_47639_66743.jpg



Overview of levee crown at crossing looking downstream.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	3.74	Rating **	M	Issue No.	55 (cont)	
LM End	3.74	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.546317 °	39.546317 °	
				-121.707510 °	-121.707510 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:47639 DS_ID:16365 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82). FS Date: 5/4/2016 8:34:00 AM						

Photo 2 of 2 : UCIP_SP_2016_47639_66741.jpg



WS flap gate blocked by debris.

LM Start	4.06	Rating **	M	Issue No.	18
LM End	4.13	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.541660 °	39.540651 °
				-121.707408 °	-121.707404 °
DWR ID	DWR_MA0013_01_s_2013_18				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_18_20160316_00008.jpg



View of the redwood trees along the landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	4.45	Rating **	M	Issue No.	47
LM End	5.35	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			39.536017 °	39.523020 °
				-121.707705 °	-121.707577 °
DWR ID	DWR_MA0013_01_s _ 2015_47				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Repair the ruts in the crown roadway.					

Photo 1 of 1 : SP_2016_MA0013_300_47_20160316_00012.jpg



View of the ruts in the crown roadway.

LM Start	5.38	Rating **	M	Issue No.	67
LM End	5.38	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.522566 °	39.522566 °
				-121.707560 °	-121.707560 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48051 DS_ID:16357 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.48). FS Date: 5/4/2016 8:51:00 AM					

Photo 1 of 2 : UCIP_SP_2016_48051_66764.jpg



Overview of levee crown at crossing looking downstream.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	5.38	Rating **	M	Issue No.	67 (cont)	
LM End	5.38	Issue Type +	En	Location *	CR	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.522566 °	39.522566 °	
				-121.707560 °	-121.707560 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:48051 DS_ID:16357 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.48). FS Date: 5/4/2016 8:51:00 AM						

Photo 2 of 2 : UCIP_SP_2016_48051_66765.jpg



View of WS slope and channel.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	5.63	Rating **	M	Issue No.	58
LM End	5.63	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.519212 °	39.519212 °
				-121.709030 °	-121.709030 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47642
DS_ID:16359
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13D_2011_p_0210 for WS gate submerged.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.73).
FS Date: 5/4/2016 8:56:00 AM

LM Start	5.63	Rating **	M	Issue No.	58 (cont)
LM End	5.63	Issue Type +	En	Location *	CR

Photo 1 of 2 : UCIP_SP_2016_47642_66793.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2 : UCIP_SP_2016_47642_66794.jpg



View of WS slope and toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	5.67	Rating **	M	Issue No.	50
LM End	5.67	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.518731 °	39.518731 °
				-121.709293 °	-121.709293 °
DWR ID	DWR_MA0013_01_s_2016_50				
Comment Code					
DE : Debris					
Inspector Comment					
Scrap metal dbris					

No Photos

LM Start	6.23	Rating **	M	Issue No.	59
LM End	6.23	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.511337 °	39.511337 °
				-121.713620 °	-121.713620 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47644 DS_ID:16361 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.34). FS Date: 5/4/2016 9:01:00 AM					

Photo 1 of 2 : UCIP_SP_2016_47644_66808.jpg



Overview of levee crown at crossing looking downstream.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	6.23	Rating **	M	Issue No.	59 (cont)	
LM End	6.23	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.511337 °	39.511337 °	
				-121.713620 °	-121.713620 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:47644 DS_ID:16361 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.34). FS Date: 5/4/2016 9:01:00 AM						

Photo 2 of 2 : UCIP_SP_2016_47644_66806.jpg



View of WS slope and toe.

LM Start	6.41	Rating **	M	Issue No.	3
LM End	6.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.508928 °	39.501438 °
				-121.714842 °	-121.719715 °
DWR ID	DWR_MA0013_01_s_2012_3				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_3_20160316_00002.jpg



View of the agricultural ditch along the toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	6.45	Rating **	U	Issue No.	73
LM End	6.45	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.508309 °	39.508309 °
				-121.715100 °	-121.715100 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48134 DS_ID:16362 EP_NO: 5200B Repair Type: Urgent Crossing Status: Found UCIP Comments: 4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition.7/13/2015 Hole still present behind the LS flashboards.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS.4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. FIELD_STRUCT_DESC: 1 of 10: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (Permit No. 5200B-1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.56)] FS Date: 5/4/2016 9:02:00 AM					

LM Start	6.45	Rating **	U	Issue No.	73 (cont)
LM End	6.45	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48134_66814.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2 : UCIP_SP_2016_48134_66813.jpg



View of WS slope and toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	6.53	Rating **	M	Issue No.	2
LM End	6.53	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.507337 °	39.507337 °
				-121.715693 °	-121.715693 °
DWR ID	DWR_MA0013_01_s_2012_2				
Comment Code					
MA : Material					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_2_20160316_00001.jpg



View of a concrete block along the toe.

LM Start	6.99	Rating **	M	Issue No.	64
LM End	6.99	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.501479 °	39.501479 °
				-121.719710 °	-121.719710 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47689 DS_ID:16329 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 LS slide gate is still bent. Everything else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10). FS Date: 5/4/2016 9:11:00 AM					

Photo 1 of 2 : UCIP_SP_2016_47689_66833.jpg



Overview of levee crown at crossing looking D/S.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	6.99	Rating **	M	Issue No.	64 (cont)	
LM End	6.99	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			39.501479 °		39.501479 °
				-121.719710 °		-121.719710 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:47689 DS_ID:16329 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/28/2016 LS slide gate is still bent. Everything else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10). FS Date: 5/4/2016 9:11:00 AM						

Photo 2 of 2 : UCIP_SP_2016_47689_66832.jpg



View of WS slope and toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	8.82	Rating **	U	Issue No.	60
LM End	8.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.478573 °	39.478573 °
				-121.736550 °	-121.736550 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47659
DS_ID:16323
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Erosion still present at the LS headwall. 7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. 5/21/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder.
FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 5 by 7 foot concrete conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.95).
FS Date: 5/4/2016 9:24:00 AM

LM Start	8.82	Rating **	U	Issue No.	60 (cont)
LM End	8.82	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47659_66881.jpg



Catwalk and screw gate located on WS.

Photo 2 of 2 : UCIP_SP_2016_47659_66884.jpg



Catwalk & gate located on WS. No daylight point on WS.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	8.89	Rating **	M	Issue No.	61
LM End	8.89	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.477588 °	39.477588 °
				-121.737040 °	-121.737040 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47664
DS_ID:16828
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Erosion happening around the concrete structure on LS. Its not yet affecting the levee but will keep monitoring.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Crossing is not visible on WS.
FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtenances include concrete pipe siphon, screw gate, and distribution box visible on landside (LS). No appurtenances found on waterside (WS). (USACE-1960) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.02).
FS Date: 5/4/2016 10:10:00 AM

LM Start	8.89	Rating **	M	Issue No.	61 (cont)
LM End	8.89	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47664_66908.jpg



Overview picture looking south

Photo 2 of 2 : UCIP_SP_2016_47664_66907.jpg



Headwall at LS distribution box

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	8.90	Rating **	U	Issue No.	49
LM End	9.18	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.477552 °	39.473908 °
				-121.737074 °	-121.739546 °
DWR ID	DWR_MA0013_01_s_2016_49				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	8.90	Rating **	M	Issue No.	52
LM End	8.90	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.477530 °	39.477530 °
				-121.737060 °	-121.737060 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47447 DS_ID:16328 EP_NO: 1234A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/28/2016 Marker missing on WS.7/13/2015 Crossing appears in good condition. No noticeable issues to report.Need to contact owner to replace marker.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: Underground telephone cable through the levee at an unknown depth. (Permit No. 1234-1947, Pacific Telephone and Telegraph Company) FS Date: 5/4/2016 10:13:29 AM					

Photo 1 of 1 : UCIP_SP_2016_47447_66909.jpg



Underground telephone cable marker located on WS.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	9.70	Rating **	M	Issue No.	5
LM End	9.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.467170 °	39.466860 °
				-121.743887 °	-121.744108 °
DWR ID	DWR_MA0013_01_s_2012_5				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_5_20160316_00003.jpg



Trim the trees along the landside slope and toe.

LM Start	9.74	Rating **	M	Issue No.	10
LM End	9.74	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.466635 °	39.466635 °
				-121.744228 °	-121.744228 °
DWR ID	DWR_MA0013_01_f_2013_10				
Comment Code					
MA : Material					
Inspector Comment					
Move the trailer and materials outside the 10 foot easement.					

Photo 1 of 1 : SP_2016_MA0013_300_10_20160316_00005.jpg



View of a trailer & material along the L/S toe.

LM Start	11.04	Rating **	M	Issue No.	17
LM End	13.28	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.449777 °	39.421255 °
				-121.755103 °	-121.774893 °
DWR ID	DWR_MA0013_01_s_2012_17				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_17_20160316_00007.jpg



View of the agricultural ditch along the toe of the levee.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

No Photos

Photo 1 of 2 : UCIP_SP_2016_47672_66940.jpg



Overview of levee crown at crossing looking downstream.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	12.19	Rating **	M	Issue No.	62 (cont)	
LM End	12.19	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.435169 °	39.435169 °	
				-121.765290 °	-121.765290 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:47672						
DS_ID:16334						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: 4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.						
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 11.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.38).						
FS Date: 5/4/2016 12:18:00 PM						

Photo 2 of 2 : UCIP_SP_2016_47672_66936.jpg



View of WS slope and channel.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	12.74	Rating **	M	Issue No.	65
LM End	12.74	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.428070 °	39.428070 °
				-121.770080 °	-121.770080 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48049
DS_ID:16336
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags.
FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwalls on both slopes (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.94). This crossing is used as an irrigation turnout bar code plate located on WS slide gate (identified as 141 and 142).
FS Date: 5/4/2016 12:22:00 PM

LM Start	12.74	Rating **	M	Issue No.	65 (cont)
LM End	12.74	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48049_66952.jpg



Overview picture looking south on right bank of Cherokee Canal.

Photo 2 of 2 : UCIP_SP_2016_48049_66959.jpg



View of WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	13.29	Rating **	M	Issue No.	72
LM End	13.29	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.421088 °	39.421088 °
				-121.775104 °	-121.775104 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48060
DS_ID:16461
EP_NO: 17030
Repair Type: Non-Urgent
Crossing Status: Indicator Found
UCIP Comments: 4/28/2016 Lines lines are suspected to be located on the upstream side of the roadway bridge and not the downstream side like the coordinates in this report show. Will need to take new coordinate readings. Markers are missing near levees.7/13/2015 Unable to locate.5/21/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate any markers.4/18/2012 Attempt to locate this crossing during next inspection when tall grass is cleared from slopes-look for utility markers.
FIELD_STRUCT_DESC: 8-inch diameter drill hole, contains 3-2 inch high density polyethylene (HDPE) and 3-1.5 HDPE fiber optic cable, backfilled with bentonite on the ends of the bore casing. Conduit is bored across and under Cherokee Canal and its levees. Permit records indicates the conduit is at least 5-feet below the bottom of the low flow of the channel. Permit indicates work was completed as shown in submitted plans. (Permit No. 17030-2000, Worldwide Fiber) Owner is listed in the permit as Pacific Fiber Link LLC but permit Inspection sheets list Worldwide Fiber.
FS Date: 5/4/2016 12:27:00 PM

LM Start	13.29	Rating **	M	Issue No.	72 (cont)
LM End	13.29	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48060_75014.jpg



Marker located along side of road about 200 yds east of levees

Photo 2 of 2 : UCIP_SP_2016_48060_75015.jpg



Crossing owner contact info

* Location LS : Land Side WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	13.76	Rating **	M	Issue No.	63
LM End	13.76	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.416833 °	39.416833 °
				-121.781930 °	-121.781930 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47677
DS_ID:16338
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends (USACE-1960).
FS Date: 5/4/2016 12:36:00 PM

LM Start	13.76	Rating **	M	Issue No.	63 (cont)
LM End	13.76	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_47677_66970.jpg



WS headwall and flap gate.

Photo 2 of 2 : UCIP_SP_2016_47677_66971.jpg



View of channel at crossing.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	13.77	Rating **	M	Issue No.	66
LM End	13.77	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.416756 °	39.416756 °
				-121.782060 °	-121.782060 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48050
DS_ID:16339
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 5/03/2016 ABANDONED CROSSING 7/13/2015
Abandoned crossing. Slide gate is buried on the WS. 5/22/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/18/2012 Non-functional crossing-buried slide gate on WS. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe. This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID# USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS slope.
FIELD_STRUCT_DESC: *ABANDONED* 12 inch steel drainpipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 1/4-inch steel plate welded on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.97).
FS Date: 5/4/2016 12:35:00 PM

LM Start	13.77	Rating **	M	Issue No.	66 (cont)
LM End	13.77	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48050_66972.jpg



Buried slide gate on the WS slope.

Photo 2 of 2 : UCIP_SP_2016_48050_66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	14.58	Rating **	U	Issue No.	69
LM End	14.58	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.409481 °	39.409481 °
				-121.794010 °	-121.794010 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48054 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioration but it was mostly underwater so could not inspect the inside of the pipe.7/13/2015 Both sides of crossing were underwater at the time of inspection.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 14.79). FS Date: 5/4/2016 12:37:00 PM					

LM Start	14.58	Rating **	U	Issue No.	69 (cont)
LM End	14.58	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48054_66976.jpg



Headwall and flapgate located on water side of levee

Photo 2 of 2 : UCIP_SP_2016_48054_66974.jpg



Headwall and flapgate located on water side of levee

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	15.72	Rating **	M	Issue No.	68
LM End	15.72	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.399051 °	39.399051 °
				-121.810550 °	-121.810550 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48494
DS_ID:16364
EP_NO: 7521
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.
FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48 inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521-1972, Askew Ranch)
FS Date: 5/26/2016 7:37:21 AM

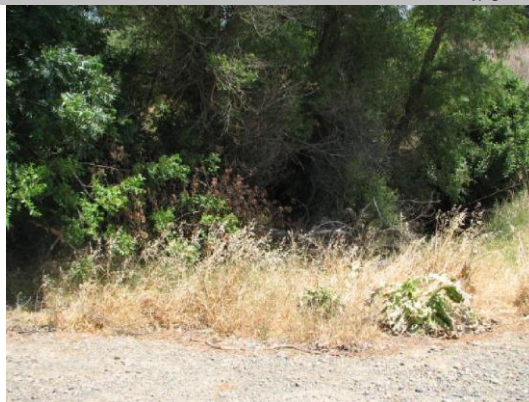
LM Start	15.72	Rating **	M	Issue No.	68 (cont)
LM End	15.72	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48494_66989.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2 : UCIP_SP_2016_48494_66987.jpg



View of WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

Sutter Maintenance Yard Maintenance Area 0013

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	16.22	Rating **	M	Issue No.	7
LM End	17.17	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.394523 °	39.385580 °
				-121.817630 °	-121.831282 °
DWR ID	DWR_MA0013_01_s_2012_7				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_300_7_20160316_00004.jpg



View of the agricultural along the toe of the levee.

LM Start	17.18	Rating **	M	Issue No.	70
LM End	17.18	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.385540 °	39.385540 °
				-121.831280 °	-121.831280 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48057 DS_ID:16371 EP_NO: 3511 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 5/03/2016 Unable to locate.7/13/2015 Unable to locate.5/22/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees. FIELD_STRUCT_DESC: U.S. Army communication cable through the levee, 3.0 feet below the crown. (Permit No. 3511-1961, US Army Engineer District) FS Date: 5/4/2016 1:01:00 PM					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/14/2016 04/14/2016	Keith Millard

LM Start	17.46	Rating **	M	Issue No.	9
LM End	17.50	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.382943 °	39.382635 °
				-121.835447 °	-121.836012 °
DWR ID	DWR_MA0013_01_s_2012_9				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	17.47	Rating **	M	Issue No.	15
LM End	17.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.382852 °	39.378481 °
				-121.835654 °	-121.842394 °
DWR ID	DWR_MA0013_01_s_2012_15				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway			Bank	Unit Miles
Unit No. 02 Cherokee Canal			Left	22.84
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/14/2016 - 4/14/2016			
DWR Inspector	Keith Millard			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	0.07	Rating **	M	Issue No.	1
LM End	0.17	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.573523 °	39.572455 °
				-121.701387 °	-121.702370 °
DWR ID	DWR_MA0013_02_s_2012_1				
Comment Code					
EQ : Equipment					
Inspector Comment					

No Photos

LM Start	0.58	Rating **	M	Issue No.	940
LM End	0.58	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.566479 °	39.566479 °
				-121.702430 °	-121.702430 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48038 DS_ID:16398 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection. FIELD_STRUCT_DESC: 24-inch drainage corrugated metal pipe (CMP) through the levee, 10.6 feet below the crown. Slide gate in CMP riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57). FS Date: 5/3/2016 12:49:00 PM					

Photo 1 of 2 : UCIP_SP_2016_48038_67047.jpg



Overview looking south

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	0.58	Rating **	M	Issue No.	940 (cont)	
LM End	0.58	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.566479 °	39.566479 °	
				-121.702430 °	-121.702430 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:48038 DS_ID:16398 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection. FIELD_STRUCT_DESC: 24-inch drainage corrugated metal pipe (CMP) through the levee, 10.6 feet below the crown. Slide gate in CMP riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57). FS Date: 5/3/2016 12:49:00 PM						

Photo 2 of 2 : UCIP_SP_2016_48038_67048.jpg



View of WS slope and toe.

LM Start	1.60	Rating **	U	Issue No.	56
LM End	1.63	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.552195 °	39.551731 °
				-121.704786 °	-121.704721 °
DWR ID	DWR_MA0013_02_s_2016_56				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_56_20160418_00119.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	1.70	Rating **	M	Issue No.	941
LM End	1.70	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.551178 °	39.551178 °
				-121.705660 °	-121.705660 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48039
DS_ID:16399
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning because of overgrown vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal (CM) drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Slide gate at the landside (LS) toe in headwall (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.70). In 1962, permit number 3953 was issued for existing pump structure, intake box, ditch and power pole. (Permit No. 3953-1960, Dr. John O. Gibbs, DBA Empire Land Company) In 1963, the pump and intake box were removed.
FS Date: 5/3/2016 12:53:00 PM

LM Start	1.70	Rating **	M	Issue No.	941 (cont)
LM End	1.70	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48039_67059.jpg



Overview of crossing

Photo 2 of 2 : UCIP_SP_2016_48039_67058.jpg



View of flap gate on WS.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	2.53	Rating **	M	Issue No.	942
LM End	2.53	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.539195 °	39.539195 °
				-121.706070 °	-121.706070 °
DWR ID					

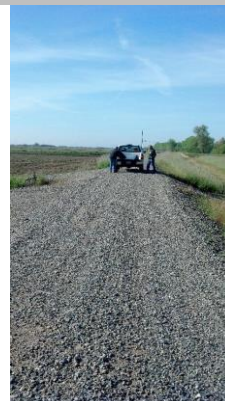
Comment Code

Inspector Comment

FS_ID:48040
DS_ID:16400
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.
FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainpipe through the levee, 9.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.54).
FS Date: 5/3/2016 12:54:00 PM

LM Start	2.53	Rating **	M	Issue No.	942 (cont)
LM End	2.53	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48040_67063.jpg



Overview of levee crown looking south

Photo 2 of 2 : UCIP_SP_2016_48040_67068.jpg



View of WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	2.62	Rating **	M	Issue No.	943
LM End	2.62	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.537864 °	39.537864 °
				-121.706190 °	-121.706190 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48042
DS_ID:16402
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functioning (propped open).
FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). Structure used to drain water from Nelson Shippe Road. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.63).
FS Date: 5/3/2016 12:58:00 PM

LM Start	2.62	Rating **	M	Issue No.	943 (cont)
LM End	2.62	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48042_67077.jpg



Overview looking south from left levee

Photo 2 of 2 : UCIP_SP_2016_48042_67076.jpg



Headwall and flap gate located on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

Levee Inspection Report By Mile - Spring 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	2.63	Rating **	M	Issue No.	944 (cont)
LM End	2.63	Issue Type +	En	Location *	LS

A photograph showing a gravel road leading into a field. A person is crouching on the road, and a vehicle is visible in the distance. The sky is blue with some clouds.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	2.65	Rating **	M	Issue No.	933
LM End	2.65	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.537466 °	39.537466 °
				-121.706240 °	-121.706240 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48048
DS_ID:16415
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.
FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 9.0 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS). Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.66).
FS Date: 5/3/2016 1:02:00 PM

LM Start	2.65	Rating **	M	Issue No.	933 (cont)
LM End	2.65	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48048_67090.jpg



Overview looking south from left levee

Photo 2 of 2 : UCIP_SP_2016_48048_67091.jpg



Headwall and flap gate located on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	3.59	Rating **	M	Issue No.	913
LM End	3.59	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523829 °	39.523829 °
				-121.706290 °	-121.706290 °
DWR ID					

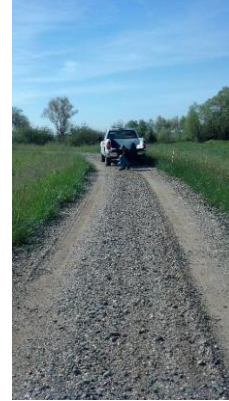
Comment Code

Inspector Comment

FS_ID:47735
DS_ID:16405
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried. 7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris. 5/29/2014 Same as last inspection. 12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function. 7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected. 4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.
FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainpipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.61)
FS Date: 5/3/2016 1:04:00 PM

LM Start	3.59	Rating **	M	Issue No.	913 (cont)
LM End	3.59	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47735_67094.jpg



Overview looking south from left levee

Photo 2 of 2 : UCIP_SP_2016_47735_67095.jpg



Flap gate submerged in water on WS of levee

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	3.83	Rating **	M	Issue No.	932
LM End	3.83	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.524350 °	39.524350 °
				-121.702180 °	-121.702180 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48046
DS_ID:16847
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.85).
FS Date: 5/3/2016 1:09:00 PM

LM Start	3.83	Rating **	M	Issue No.	932 (cont)
LM End	3.83	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48046_67107.jpg



Overview looking south on left levee

Photo 2 of 2 : UCIP_SP_2016_48046_67108.jpg



Headwall and flap gate located on WS toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	4.04	Rating **	M	Issue No.	911
LM End	4.78	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.526653 °	39.534091 °
				-121.699675 °	-121.690404 °
DWR ID	DWR_MA0013_02_s_2012_911				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_911_20160316_00017.jpg



View of agricultural ditch along the toe.

LM Start	5.29	Rating **	M	Issue No.	927
LM End	5.29	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.525958 °	39.525958 °
				-121.692730 °	-121.692730 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47723 DS_ID:16409 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.34). FS Date: 5/3/2016 1:32:00 PM					

Photo 1 of 2 : UCIP_SP_2016_47723_67146.jpg



Overview of crossing looking downstream.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	5.29	Rating **	M	Issue No.	927 (cont)	
LM End	5.29	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.525958 °	39.525958 °	
				-121.692730 °	-121.692730 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:47723 DS_ID:16409 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.34). FS Date: 5/3/2016 1:32:00 PM						

Photo 2 of 2 : UCIP_SP_2016_47723_67149.jpg



View of WS headwall with dense vegetation in channel.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	5.36	Rating **	M	Issue No.	928
LM End	5.36	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.525361 °	39.525361 °
				-121.693630 °	-121.693630 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47724
DS_ID:16410
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.
FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.41).
FS Date: 5/3/2016 1:50:00 PM

LM Start	5.36	Rating **	M	Issue No.	928 (cont)
LM End	5.36	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_47724_67152.jpg



Overview of site

Photo 2 of 2 : UCIP_SP_2016_47724_67150.jpg



Capped irrigation pipe located on water side of levee

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	5.80	Rating **	U	Issue No.	929
LM End	5.80	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523381 °	39.523381 °
				-121.701270 °	-121.701270 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47725
DS_ID:16411
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing.6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate.
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends (USACE-1960) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.85).
FS Date: 5/3/2016 1:57:00 PM

LM Start	5.80	Rating **	U	Issue No.	929 (cont)
LM End	5.80	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_47725_67155.jpg



Overview looking south

Photo 2 of 2 : UCIP_SP_2016_47725_67157.jpg



Headwall and flap gate on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	6.12	Rating **	M	Issue No.	55
LM End	6.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.521634 °	39.521634 °
				-121.706184 °	-121.706184 °
DWR ID	DWR_MA0013_02_s_2014_55				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove the tree limbs from the landside slope.					

Photo 1 of 1 : SP_2016_MA0013_301_55_20160316_00014.jpg



View of the tree limbs on the landside slope and toe.

LM Start	6.18	Rating **	M	Issue No.	12
LM End	7.54	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.520843 °	39.502958 °
				-121.706345 °	-121.716953 °
DWR ID	DWR_MA0013_02_s_2012_12				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_12_20160316_00005.jpg



View of the agricultural ditch along the toe.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	7.18	Rating **	M	Issue No.	930
LM End	7.18	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.507570 °	39.507570 °
				-121.713870 °	-121.713870 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47732 DS_ID:17518 EP_NO: 5200B Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/29/2014 Same as last inspection.12/9/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate.4/24/2012 Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure. FIELD_STRUCT_DESC: 10 of 10: 36 inch corrugated metal spill pipe through the levee embankment, unknown depth. (Permit No. 5200B-1967, Richvale Irrigation District) Additional permits related to this structure include Permit No. 5200 and 5200A. FS Date: 5/3/2016 2:11:00 PM					

No Photos

LM Start	7.46	Rating **	C	Issue No.	60
LM End	8.20	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			39.503943 °	39.495120 °
				-121.716310 °	-121.724060 °
DWR ID	DWR_MA0013_02_s_2015_60				
Comment Code					
C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comment					
Repair the ruts in the crown roadway.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	8.30	Rating **	M	Issue No.	931
LM End	8.30	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.493850 °	39.493850 °
				-121.724780 °	-121.724780 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47733
DS_ID:16413
EP_NO: 14704
Repair Type: Non-Urgent
Crossing Status: Indicator Found
UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition. Unusre on the permit issues below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).
FIELD_STRUCT_DESC: Fiber optic cable through levee at approximately 3.5 feet. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704-1987, Sprint)
FS Date: 5/3/2016 2:11:00 PM

LM Start	8.30	Rating **	M	Issue No.	931 (cont)
LM End	8.30	Issue Type +	En	Location *	CR

Photo 1 of 2 : UCIP_SP_2016_47733_67191.jpg



Buried cable box located on the LS edge.

Photo 2 of 2 : UCIP_SP_2016_47733_67192.jpg



WS view cable line attached to highway bridge.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	8.30	Rating **	M	Issue No.	912
LM End	8.30	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.493780 °	39.493780 °
				-121.724840 °	-121.724840 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47734
DS_ID:16404
EP_NO: 10589A
Repair Type: Non-Urgent
Crossing Status: Indicator Found
UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).
FIELD_STRUCT_DESC: 4 inch steel pipe, contains three telephone cables, through the levee at approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589-1987, PG&E)
FS Date: 5/3/2016 2:12:00 PM

LM Start	8.30	Rating **	M	Issue No.	912 (cont)
LM End	8.30	Issue Type +	En	Location *	CR

Photo 1 of 2 : UCIP_SP_2016_47734_67211.jpg



Buried cable box located on the landside edge.

Photo 2 of 2 : UCIP_SP_2016_47734_67210.jpg



Waterside view of utility line alignment through levee then attached to bridge.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	9.22	Rating **	M	Issue No.	57
LM End	9.22	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			39.481714 °	39.481714 °
				-121.732210 °	-121.732210 °
DWR ID	DWR_MA0013_02_s_2016_57				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					

No Photos

LM Start	9.66	Rating **	M	Issue No.	914
LM End	9.66	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476260 °	39.476260 °
				-121.736230 °	-121.736230 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47742 DS_ID:18912 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information. FIELD_STRUCT_DESC: Buried fiber optic line through the levee at depth unknown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601. (Qwest Communication) FS Date: 5/3/2016 2:17:00 PM					

Photo 1 of 2 : UCIP_SP_2016_47742_67292.jpg



Overview of levee crown at crossing.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	9.66	Rating **	M	Issue No.	914 (cont)	
LM End	9.66	Issue Type +	En	Location *	CR	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.476260 °	39.476260 °	
				-121.736230 °	-121.736230 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:47742						
DS_ID:18912						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Indicator Found						
UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.						
FIELD_STRUCT_DESC: Buried fiber optic line through the levee at depth unknown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601. (Qwest Communication)						
FS Date: 5/3/2016 2:17:00 PM						

Photo 2 of 2 : UCIP_SP_2016_47742_67291.jpg



Marker for buried fiber optic cable on WS.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	9.67	Rating **	M	Issue No.	915
LM End	9.67	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476140 °	39.476140 °
				-121.736390 °	-121.736390 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47743
DS_ID:18913
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Indicator Found
UCIP Comments: 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/9/2013 Same as last inspection. 4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspection submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates. FIELD_STRUCT_DESC: 8-inch diameter high pressure line bored through through levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email yeok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing.
FS Date: 5/3/2016 2:18:00 PM

LM Start	9.67	Rating **	M	Issue No.	915 (cont)
LM End	9.67	Issue Type +	En	Location *	CR

Photo 1 of 2 : UCIP_SP_2016_47743_67295.jpg



Overview of levee crown at crossing.

Photo 2 of 2 : UCIP_SP_2016_47743_67294.jpg



WS marker with utility contact information.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	9.69	Rating **	M	Issue No.	916
LM End	9.69	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.475960 °	39.475960 °
				-121.736540 °	-121.736540 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47744
DS_ID:18914
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Indicator Found
UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown whether this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing.
FIELD_STRUCT_DESC: Underground cable through the levee at depth unknown. Owner of encroachment is Pacific Telephone.
FS Date: 5/3/2016 2:20:00 PM

LM Start	9.69	Rating **	M	Issue No.	916 (cont)
LM End	9.69	Issue Type +	En	Location *	CR

Photo 1 of 2 : UCIP_SP_2016_47744_67299.jpg



Overview of levee crown at crossing.

Photo 2 of 2 : UCIP_SP_2016_47744_67300.jpg



Marker located on LS.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	9.88	Rating **	M	Issue No.	917
LM End	9.88	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.473410 °	39.473410 °
				-121.738190 °	-121.738190 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47745 DS_ID:17731 EP_NO: 16994 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate any signs of this crossing.4/24/2012 Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again during next inspection. FIELD_STRUCT_DESC: 10 inch diameter high-density polyethylene (HDPE) conduit containing fiber-optic cables across and under (bored) Cherokee Canal and its levees. Twelve 1.5 inch PVC inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994-2000, Level 3 Comm) FS Date: 5/3/2016 2:21:00 PM					

No Photos

LM Start	10.03	Rating **	M	Issue No.	13
LM End	10.52	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.471517 °	39.465113 °
				-121.739433 °	-121.743592 °
DWR ID	DWR_MA0013_02_s_ 2012_13				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_13_20160316_00006.jpg



View of the agricultural ditch along the toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	10.55	Rating **	M	Issue No.	918
LM End	10.55	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.464710 °	39.464710 °
				-121.743810 °	-121.743810 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47746 DS_ID:16406 EP_NO: 1238 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/26/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears in good condition. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain records. FIELD_STRUCT_DESC: 8-inch gas pipe through the levee at unknown elevation. (Permit No. 1238-1947, PG&E) Utility marker visible at the upstream and downstream face of highway bridge and along highway. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 10.67). USA marking on highway indicate 6" STL LN 151. FS Date: 5/3/2016 2:23:00 PM					

Photo 1 of 2 : UCIP_SP_2016_47746_67332.jpg



Utility marker is located near the upstream face of the highway bridge.

LM Start	10.55	Rating **	M	Issue No.	918 (cont)
LM End	10.55	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP_SP_2016_47746_67333.jpg



Utility is angled. Alignment crosses highway.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	10.56	Rating **	M	Issue No.	934
LM End	10.56	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.464590 °	39.464590 °
				-121.743910 °	-121.743910 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48065 DS_ID:16472 EP_NO: 10939 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/26/2016 Pole within the channel not removed per permit description.6/30/2015 same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 According to permit the existing pole and buried cable in the overflow area were to be removed. Pole is present in the channel. FIELD_STRUCT_DESC: Reroute a buried wire across the left bank levee of Cherokee Canal at State Highway 162 Bridge abutment from that point to the downstream side of the bridge. From there the wire extends to the gaging station at the center of the bridge. The facility maintains service to the Department of Water Resources' Metering Station midspan of the bridge. (Permit No. 10939-1976, Pacific Telephone and Telegraph Company) FS Date: 5/3/2016 2:26:00 PM					

Photo 1 of 1 : UCIP_SP_2016_48065_67334.jpg



Pole within the channel was not removed.

LM Start	10.59	Rating **	M	Issue No.	18
LM End	11.66	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.464305 °	39.450333 °
				-121.744172 °	-121.753157 °
DWR ID	DWR_MA0013_02_s_2012_18				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_18_20160316_00007.jpg



View of the agricultural ditch along the toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	12.88	Rating **	M	Issue No.	919
LM End	12.88	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.434779 °	39.434779 °
				-121.763940 °	-121.763940 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47748
DS_ID:16385
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS.
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch Delleher siphon (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.03).
FS Date: 5/3/2016 2:27:00 PM

LM Start	12.88	Rating **	M	Issue No.	919 (cont)
LM End	12.88	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47748_67336.jpg



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Photo 2 of 2 : UCIP_SP_2016_47748_67337.jpg



Stand pipe with screw gate WS

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	13.40	Rating **	M	Issue No.	19
LM End	16.88	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.428192 °	39.406240 °
				-121.768443 °	-121.794863 °
DWR ID	DWR_MA0013_02_s _ 2012_19				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_19_20160316_00008.jpg



View of the agricultural ditch along the toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	15.44	Rating **	M	Issue No.	935
LM End	15.44	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.419209 °	39.419209 °
				-121.773680 °	-121.773680 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48066 DS_ID:16376 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unable to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.62). FS Date: 5/3/2016 2:30:00 PM					

LM Start	15.44	Rating **	M	Issue No.	935 (cont)
LM End	15.44	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48066_67341.jpg



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Photo 2 of 2 : UCIP_SP_2016_48066_67343.jpg



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

* Location LS : Land Side WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
N/A : Not Applicable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain			

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	15.68	Rating **	M	Issue No.	920
LM End	15.68	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.417043 °	39.417043 °
				-121.777240 °	-121.777240 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47751
DS_ID:16382
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.
FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS) (USACE-1960). WS gate bolted shut and LS crossing is non-operable (ominlet not found). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.87).
FS Date: 5/3/2016 2:32:00 PM

LM Start	15.68	Rating **	M	Issue No.	920 (cont)
LM End	15.68	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47751_67352.jpg



Overview of crossing looking downstream of the left bank of Cherokee

Photo 2 of 2 : UCIP_SP_2016_47751_67351.jpg



View of WS slope. Limited inspection due to the dense vegetation.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	15.97	Rating **	M	Issue No.	61
LM End	15.97	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.414448 °	39.414448 °
				-121.781532 °	-121.781532 °
DWR ID	DWR_MA0013_02_s_2015_61				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove the tree from the waterside slope and toe.					

Photo 1 of 1 : SP_2016_MA0013_301_61_20160316_00016.jpg



View of the tree along the waterside toe and slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	16.07	Rating **	M	Issue No.	921
LM End	16.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.413595 °	39.413595 °
				-121.782890 °	-121.782890 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47752
DS_ID:16377
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. 6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure. 12/4/2013 Same as last inspection. 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtenances in good condition. 4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under separate permit.
FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26).
FS Date: 5/3/2016 2:34:00 PM

Photo 1 of 2 : UCIP_SP_2016_47752_67353.jpg



Overview of levee crown.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	16.07	Rating **	M	Issue No.	921 (cont)
LM End	16.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.413595 °	39.413595 °
				-121.782890 °	-121.782890 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47752
DS_ID:16377
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. 6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure. 12/4/2013 Same as last inspection. 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtenances in good condition. 4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under separate permit.
FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26).
FS Date: 5/3/2016 2:34:00 PM

Photo 2 of 2 : UCIP_SP_2016_47752_67359.jpg



Appurtenances on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	17.05	Rating **	M	Issue No.	20
LM End	18.72	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.404695 °	39.389187 °
				-121.797266 °	-121.821233 °
DWR ID	DWR_MA0013_02_s_2012_20				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_20_20160316_00009.jpg



View of the agricultural ditch along the toe.

LM Start	19.37	Rating **	M	Issue No.	21
LM End	19.92	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.383252 °	39.378192 °
				-121.830565 °	-121.838543 °
DWR ID	DWR_MA0013_02_s_2012_21				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_21_20160316_00010.jpg



View of the agricultural ditch along the toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	19.92	Rating **	M	Issue No.	923
LM End	19.92	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.378198 °	39.378198 °
				-121.838570 °	-121.838570 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47758
DS_ID:16375
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.
FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). (USACE-1960) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 20.15).
FS Date: 5/3/2016 2:45:00 PM

LM Start	19.92	Rating **	M	Issue No.	923 (cont)
LM End	19.92	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47758_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

Photo 2 of 2 : UCIP_SP_2016_47758_67400.jpg




Erosion behind WS headwall at the upstream edge of headwall.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Levee Inspection Report By Mile - Spring 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

Photo 1 of 1 : SP_2016_MA0013_301_51_20160316_00011.jpg



05/05/2019


View of the tree limbs along the landside toe.

Photo 1 of 1 : SP_2016_MA0013_301_6_20160316_00002.jpg



Trim the trees 5 feet to allow visibility along the landside slope.

Photo 1 of 1 : SP_2016_MA0013_301_52_20160316_00012.jpg



09/06/2015

View of the trees limbs along the landside slope and toe.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	20.76	Rating **	U	Issue No.	937
LM End	20.76	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370676 °	39.370676 °
				-121.850490 °	-121.850490 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48035
DS_ID:16383
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 No repairs have been made at this crossing yet. 6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/8/2013 Same as last inspection. 4/19/2012 LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing.
FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).
FS Date: 5/3/2016 2:49:00 PM

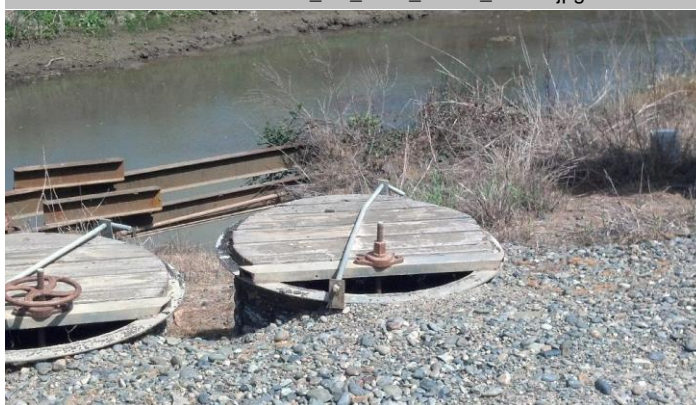
LM Start	20.76	Rating **	U	Issue No.	937 (cont)
LM End	20.76	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48035_67406.jpg



Corrugated metal pipe risers with slide gates located on WS slope.

Photo 2 of 2 : UCIP_SP_2016_48035_67407.jpg



Corrugated metal pipe riser for pipe 1 of 3. Slide gate is missing handle.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	20.76	Rating **	U	Issue No.	924
LM End	20.76	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370679 °	39.370679 °
				-121.850500 °	-121.850500 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47760
DS_ID:17014
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 No repairs have been made at this crossing yet.6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner.
FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).
FS Date: 5/3/2016 2:51:00 PM

LM Start	20.76	Rating **	U	Issue No.	924 (cont)
LM End	20.76	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47760_67416.jpg



WS view of corrugated metal pipe risers .

Photo 2 of 2 : UCIP_SP_2016_47760_67418.jpg



Riser for pipe 2 of 3.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	20.76	Rating **	U	Issue No.	925
LM End	20.76	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370679 °	39.370679 °
				-121.850500 °	-121.850500 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:47761
DS_ID:17185
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 No repairs have been made at this crossing yet. 6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/08/2013 Same as last inspection. 4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner.
FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).
FS Date: 5/3/2016 2:51:00 PM

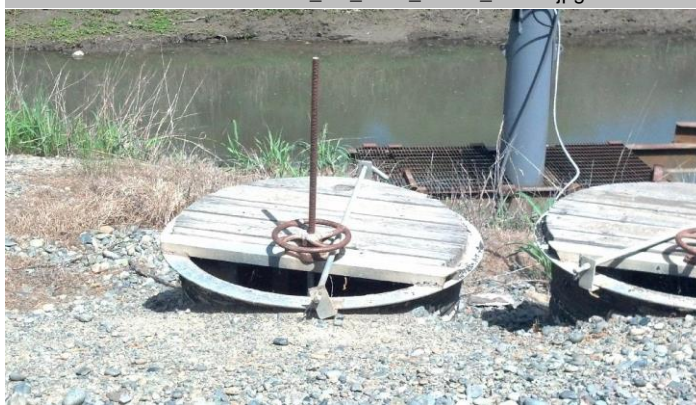
LM Start	20.76	Rating **	U	Issue No.	925 (cont)
LM End	20.76	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_47761_67441.jpg



View of corrugated metal risers located on WS.

Photo 2 of 2 : UCIP_SP_2016_47761_67443.jpg



View of corrugated metal pipe for pipe 3 of 3.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

Sutter Maintenance Yard Maintenance Area 0013

Overview of crossing looking downstream.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	21.35	Rating **	M	Issue No.	939 (cont)
LM End	21.35	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.366155 °	39.366155 °
				-121.859880 °	-121.859880 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48493
DS_ID:16384
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planned to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more details on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.
FIELD_STRUCT_DESC: 24-inch corrugated metal (CM) drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe crosses the channel (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.60). Corroded section of existing pipe, 9-feet 8-inches of an 18-inch CM pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231-1960, Estate of Walter L. King)
FS Date: 5/26/2016 7:31:43 AM

Photo 2 of 2 : UCIP_SP_2016_48493_67451.jpg



View of WS daylight. Hole present at pipe daylight.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	21.83	Rating **	M	Issue No.	938
LM End	21.83	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.362378 °	39.362378 °
				-121.867350 °	-121.867350 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48036 DS_ID:16394 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS) (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 22.08). Rusted gate located on WS (gate stuck). FS Date: 5/3/2016 2:57:00 PM					

LM Start	21.83	Rating **	M	Issue No.	938 (cont)
LM End	21.83	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48036_67462.jpg



Overview of crossing looking upstream at the left bank of Cherokee Canal.

Photo 2 of 2 : UCIP_SP_2016_48036_67460.jpg



View of WS headwall.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	21.86	Rating **	M	Issue No.	926
LM End	21.86	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.362103 °	39.362103 °
				-121.867820 °	-121.867820 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:47766 DS_ID:16374 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/26/2016 Communication Splice box was still present. Not sure what was done to ever resolve the encroachment issue.6/30/2015 Same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 Unauthorized Encroachment. This crossing is listed multiple times in the USACE Periodic Inspection report as USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve. FIELD_STRUCT_DESC: *ILLEGAL ENCROACHMENT* Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along landside (LS) shoulder and levee crown hinge point. Levee sloughs along cable trench after heavy rains. FS Date: 5/3/2016 3:01:00 PM					

Photo 1 of 1 : UCIP_SP_2016_47766_67480.jpg



View of utility line located on LS toe.

LM Start	21.87	Rating **	U	Issue No.	59
LM End	22.09	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.362022 °	39.360294 °
				-121.867949 °	-121.871339 °
DWR ID	DWR_MA0013_02_s_2016_59				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain			

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	22.03	Rating **	U	Issue No.	58
LM End	22.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.360747 °	39.360747 °
				-121.870493 °	-121.870493 °
DWR ID	DWR_MA0013_02_s_2016_58				
Comment Code					
V7 : Trees / Woody Vegetation					
Inspector Comment					
Fallen tree on LS slope					

No Photos

LM Start	22.07	Rating **	M	Issue No.	4
LM End	22.13	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.360410 °	39.359920 °
				-121.871125 °	-121.872067 °
DWR ID	DWR_MA0013_02_s_2012_4				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_4_20160316_00001.jpg



View of landscaping along the toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	22.15	Rating **	M	Issue No.	936
LM End	22.15	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.359827 °	39.359827 °
				-121.872300 °	-121.872300 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48068
DS_ID:16391
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection.
FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. This pipe runs on an angle through the levee, then underground along the landside (LS) slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS (USACE-1960).
FS Date: 5/3/2016 3:03:00 PM

LM Start	22.15	Rating **	M	Issue No.	936 (cont)
LM End	22.15	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48068_67498.jpg



View of WS slope looking from WS headwall to levee crown.

Photo 2 of 2 : UCIP_SP_2016_48068_67496.jpg



View of WS slope looking from WS headwall to levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/14/2016 04/14/2016	Keith Millard

LM Start	22.16	Rating **	M	Issue No.	8
LM End	22.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.359707 °	39.359707 °
				-121.872555 °	-121.872555 °
DWR ID	DWR_MA0013_02_s _ 2012_8				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_8_20160316_00004.jpg



View of the debris & prunings.

LM Start	22.33	Rating **	A/W	Issue No.	62
LM End	22.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.358419 °	39.358419 °
				-121.875088 °	-121.875088 °
DWR ID	DWR_MA0013_02_s _ 2016_62				
Comment Code					
Inspector Comment					

No Photos

LM Start	22.58	Rating **	M	Issue No.	7
LM End	22.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.356498 °	39.356303 °
				-121.879030 °	-121.879417 °
DWR ID	DWR_MA0013_02_s _ 2012_7				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : SP_2016_MA0013_301_7_20160316_00003.jpg



View of the erosion along the canal.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement